

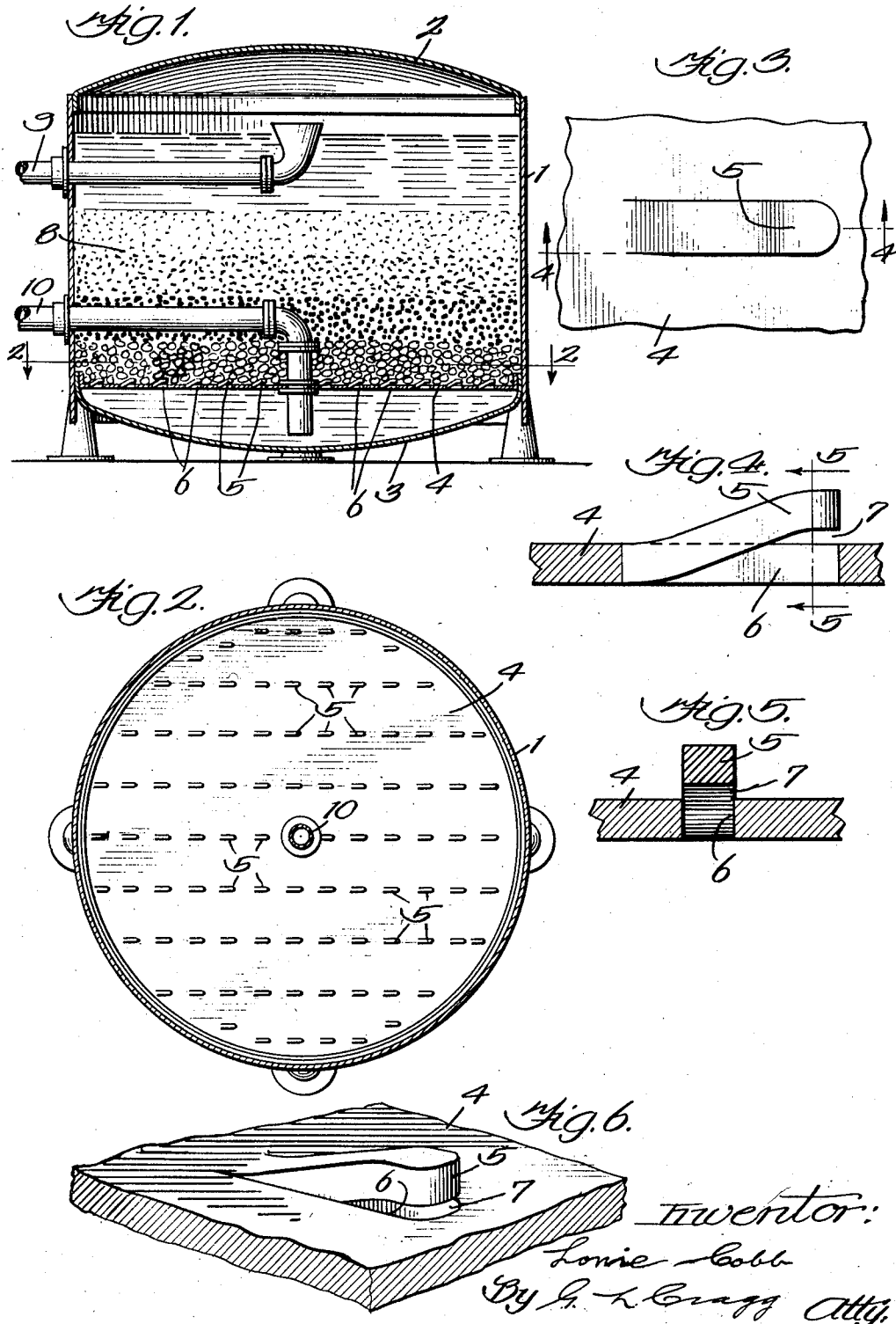
Jan. 18, 1927.

1,615,071

L. COBB

FILTERING TANK

Filed May 6, 1926



UNITED STATES PATENT OFFICE.

LONIE COBB, OF HAMMOND, INDIANA, ASSIGNOR TO GRAVER CORPORATION, OF EAST CHICAGO, INDIANA, A CORPORATION OF ILLINOIS.

FILTERING TANK.

Application filed May 6, 1926. Serial No. 107,070.

My invention relates to tanks employing plates for supporting filtering or other media within the tanks through which liquid is to pass and having openings formed there-
6 through for the passage of liquid.

My invention resides in providing guards that are preferably in the form of tongues which are carried by the medium supporting plate of such a tank, each tongue having
10 a portion unconnected with the plate and in register with an opening and being spaced apart from the plate to afford a passage communicating with said opening between
15 the plate and tongue. In the preferred embodiment of the invention the tongues are integrally formed with the plates by being struck therefrom, each tongue having an un-
connected portion spaced apart from the medium supporting plate to an extent to afford
20 a passage communicating with said opening between the plate and tongue that is narrower than the opening. In the case of filters the portion of the filtering medium di-
25 rectly overlying the filtering plate is desirably composed of gravel that is too large to enter the spaces between the tongues and plate so that the openings in the plate for the
passage of the liquid may not be clogged by the filtering medium.

30 I will explain my invention more fully by reference to the accompanying drawing in which Fig. 1 is a sectional elevation of a filtering tank equipped in accordance with the preferred embodiment of the invention; Fig.
35 2 is a sectional plan view on line 2—2 of Fig. 1; Fig. 3 is a plan view, on a larger scale, of a portion of the filtering plate; Fig. 4 is a sectional view on line 4—4 of Fig. 3; Fig. 5
is a sectional view on line 5—5 of Fig. 4; and Fig. 6 is a perspective view of the por-
40 tion shown in Fig. 3.

The tank 1 is provided with top and bottom walls 2 and 3 and a plate 4 at the bot-
45 tom of the tank a short distance above the tank bottom. The plate has guards 5, preferably in the form of tongues which are struck upwardly therefrom, each tongue hav-
ing a portion unconnected with the plate and overlying and in register with the open-
50 ing 6 left in the plate due to the formation of the tongue and spaced apart from the plate to an extent to afford a passage 7 com-

municating with said opening between the plate and tongue that is narrower than the opening. In the case of a filter, the filter- 55
ing medium 8 is preferably graded from sand at the top to coarse gravel at the filter-
ing plate, this gravel being of such size that it cannot enter the spaces 7 whereby the
openings 6 will not become clogged. The 60
liquid to be treated is received through a supply pipe 9 which discharges into the space between the top of the tank and the
filtering or other medium, and passes down- 65
wardly through this medium and through the passages 7 and openings 6 into the space
between the medium supporting plate and the bottom of the tank from whence it may
be withdrawn for use in filtered or treated
70 condition through the pipe 10. The medium upon the plate 4 may be cleansed by
causing cleapsed or softened water to pass upwardly through the plate and the medium
thereon.

Having thus described my invention, I 75
claim:—

1. A tank having a plate in supporting relation to a liquid treating medium within the tank and having guards struck there-
80 from, each guard having a portion unconnected with the plate in register with the opening left in the plate due to the forma-
tion of the guard and being spaced apart from the plate to an extent to afford a pas-
85 sage communicating with said opening between the plate and guard that is narrower than the opening.

2. A tank having a plate in supporting relation to a liquid treating medium within the tank and having guards struck there-
90 from, each guard having a portion unconnected with the plate in register with the opening left in the plate due to the forma-
tion of the guard and being spaced apart from the plate to afford a passage communi- 95
cating with said opening between the plate and guard.

3. A tank having a plate in supporting relation to a liquid treating medium within the tank and carrying guards, each guard 100
having a portion unconnected with the plate in register with an opening and being spaced apart from the plate to an extent to afford a
passage communicating with said opening be-

tween the plate and guard that is narrower than the opening.

4. A tank having a plate in supporting relation to a liquid treating medium within the tank and carrying guards, each guard having a portion unconnected with the plate in register with an opening and being spaced

apart from the plate to afford a passage communicating with said opening between the plate and guard.

In witness whereof, I hereunto subscribe my name.

LONIE COBB.